

# NRF52840 MICRO DEVELOPMENT KIT

SKU 102991094

## Description

The nRF52840-MDK is a versatile, easy-to-use IoT hardware platform for Bluetooth 5, Bluetooth Mesh, Thread, IEEE 802.15.4, ANT and 2.4GHz proprietary applications using the nRF52840 SoC.

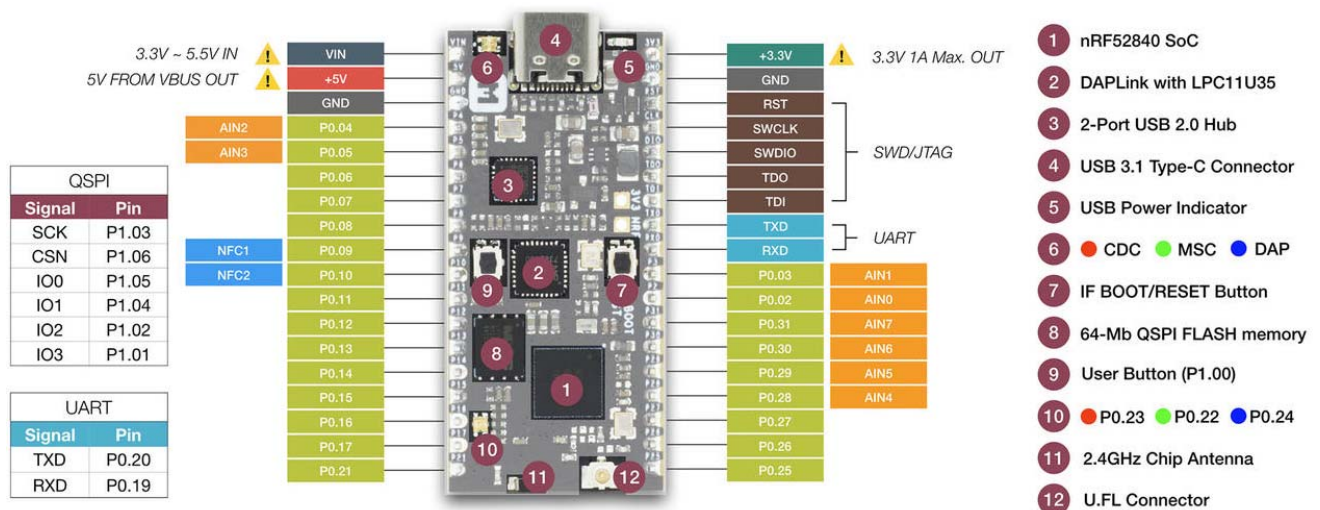
The development kit comes with a fully integrated debugger (also known as [DAPLink](#)) that provides USB drag-and-drop programming, USB Virtual COM port and CMSIS-DAP interface.

The kit contains a Microchip USB 2.0 Hi-Speed hub controller with two downstream ports: one for DAPLink interface and one for nRF52840 USB device controller. The kit also features ultra-low power 64-Mb QSPI FLASH memory, programmable user button, RGB LED, up to 24 GPIOs, antenna selection for custom applications.

It supports the standard Nordic Software Development Tool-chain using GCC, Keil and IAR. It can also be used to play with many popular frameworks, such as nRF5 SDK, nRF5 SDK for Mesh, OpenThread, ZigBee 3.0, Mbed OS 5, Zephyr, Mynewt, Web Bluetooth, iBeacon, Eddystone, and more.

## Hardware Features:

- Nordic nRF52840 System-on-Chip
  - ARM® Cortex®-M4F processor optimized for ultra-low power operation
  - Combining Bluetooth 5, Bluetooth Mesh, Thread, IEEE 802.15.4, ANT and 2.4GHz proprietary
  - On-chip NFC-A tag
  - On-chip USB 2.0 (Full speed) controller
  - ARM TrustZone® Cryptocell 310 security subsystem
  - 1 MB FLASH and 256 kB RAM
- Program/Debug options with DAPLink
  - MSC - drag-n-drop programming flash memory
  - CDC - virtual com port for log, trace and terminal emulation
  - HID - CMSIS-DAP compliant debug channel
  - WEBUSB HID - CMSIS-DAP compliant debug channel
- Microchip 2-Port USB 2.0 Hi-Speed Hub Controller
- External ultra-low power 64-Mb QSPI FLASH memory
- Up to 24 GPIOs available via headers
- IF Boot/Reset Button
- User programmable Button and RGB LED
- On-board 2.4G chip antenna
- U.FL connector selectable for external antenna
- 3.3V regulator with 1A peak current output
- VBUS & VIN Power-Path Management
- Reversible USB 3.1 Type-C Connector
- Breadboard-friendly with dual 18-Pin headers
- Measures 1.97"x 0.9"x 0.51" (50mm x 23mm x 13mm) with headers soldered in



## Technical Details

Dimensions	50mm x 23mm x 13mm
Weight	G.W 36g
Battery	Exclude

## Part List

nRF52840-MDK Board	1
USB 3.1 Type-C Cable	1

